



State Pier Infrastructure Improvements Public Information Meeting

September 17, 2019

Objectives For Tonight's Presentation

- Public Comment and Information Session for the New London community on the progress of the infrastructure improvement proposal for State Pier
- The current state of State Pier, the need for infrastructure improvements and the path to pier transformation
- The offshore wind opportunity for New London & Connecticut
- Overview of proposed infrastructure improvements to State Pier & planned use of State Pier as offshore wind turbine generator pre-assembly hub
- Next Steps

Built More Than 100 Years Ago by the State of Connecticut, State Pier has Become an Under-Utilized Asset in Need of Modernization

- Traffic at State Pier currently averages ~23 port calls annually.
- By contrast, New Haven experiences more than 200 port calls annually.
- Increasing commodity cargo would have limited impact on the local economy.
- A modern state pier and offshore wind turbine generator hub will positively impact the local and regional economy creating a long-term high value asset.

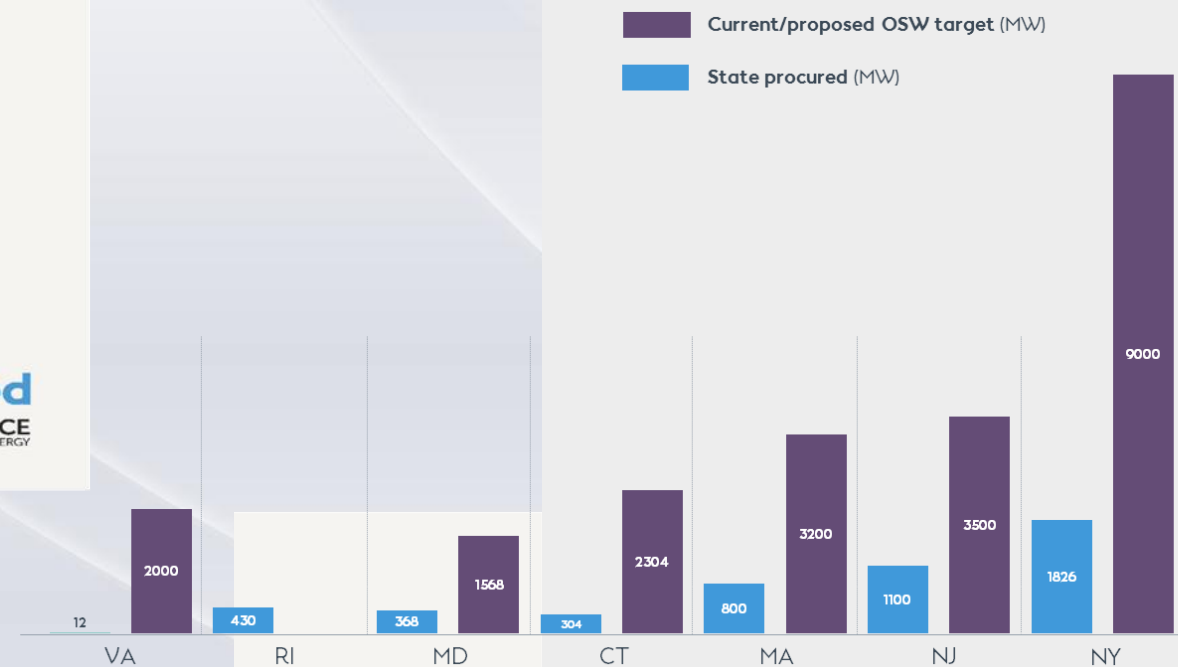


Existing condition of CV Pier with State Pier in background.

2011 Department Of Transportation Study Identified Improvements That Would Improve Marketability Of State Pier

- 2011 *State Pier Needs and Deficiency Planning Study* recommended various improvements to State Pier:
 - Prepare environmental permit documents
 - Acquire more than 11 acres of additional property
 - Relocate and improve main access road
 - Increase the lay-down area between the bulkhead between NECR Pier and State Pier
 - Remove existing dolphin piles and platforms
 - Upgrade lighting
 - Dredge facility place in CDF
 - Remove, re-grade, and level entire northeast side of facility
 - Demolish administration building, cargo warehouse and maintenance garage
 - Complying with environmental storm water runoff management practices
- Before proceeding with these improvements, the DOT Study recommended:
 - First completing solicitation for State Pier operator
 - Develop a commercial business case and/or identify a complimentary private investment

In the Past Three Years, Offshore Wind has Emerged as the Fastest Growing Source of Clean Electricity



New England & other Northeastern states plan to procure ~20,000 MW of offshore wind by 2030, enough clean energy to serve 10 million homes

Original Scope: Deepwater Wind

- In 2018 Deepwater Wind won contracts to deliver a total of 700 MW of offshore wind power from its project Revolution Wind.
- Deepwater Wind committed to a modest scope of economic activity associated with the project in New London: secondary steel work and sub-station assembly. It also committed to fund \$22.5M for upgrades to State Pier.
- In Fall 2018 Deepwater Wind was acquired by Ørsted; and Eversource subsequently became a 50/50 partner in the Revolution Wind project.

Today's Scope: Ørsted & Eversource

- The Joint Venture of Ørsted & Eversource is making a transformational decade long, multi-project commitment to State Pier and the City of New London with a capital investment of at least \$57 million plus \$30 million in lease fees.
- State Pier will be the Northeast Hub for all Wind Turbine Generator activity for all of Ørsted & Eversource's northeast projects.
- Ørsted and Eversource have secured contracts of over 1,700 MW to serve CT, RI and NY to date.
- Specialized offshore wind terminals are the core around which other investment occurs over time.
- Similar wind terminals provide primary, secondary, and spinoff economic impact to the local economy.

State Pier is Uniquely Positioned to Play a Major Role in Offshore Wind Construction But Requires Major Investment and Time is of the Essence



Advantages to State Pier:

- Strategically located near offshore wind lease areas
- Direct access to the ocean with no bridge or overhead obstruction
- Well-protected harbor with deep water access enables utilization of next-generation wind turbine installation vessels
- Existing skilled marine industries and workforce

Disadvantages to State Pier:

- Major cost for heavy lift capable upgrade
- Relatively small footprint
- Tight timeframe to complete permitting and construction to deliver first offshore wind farms

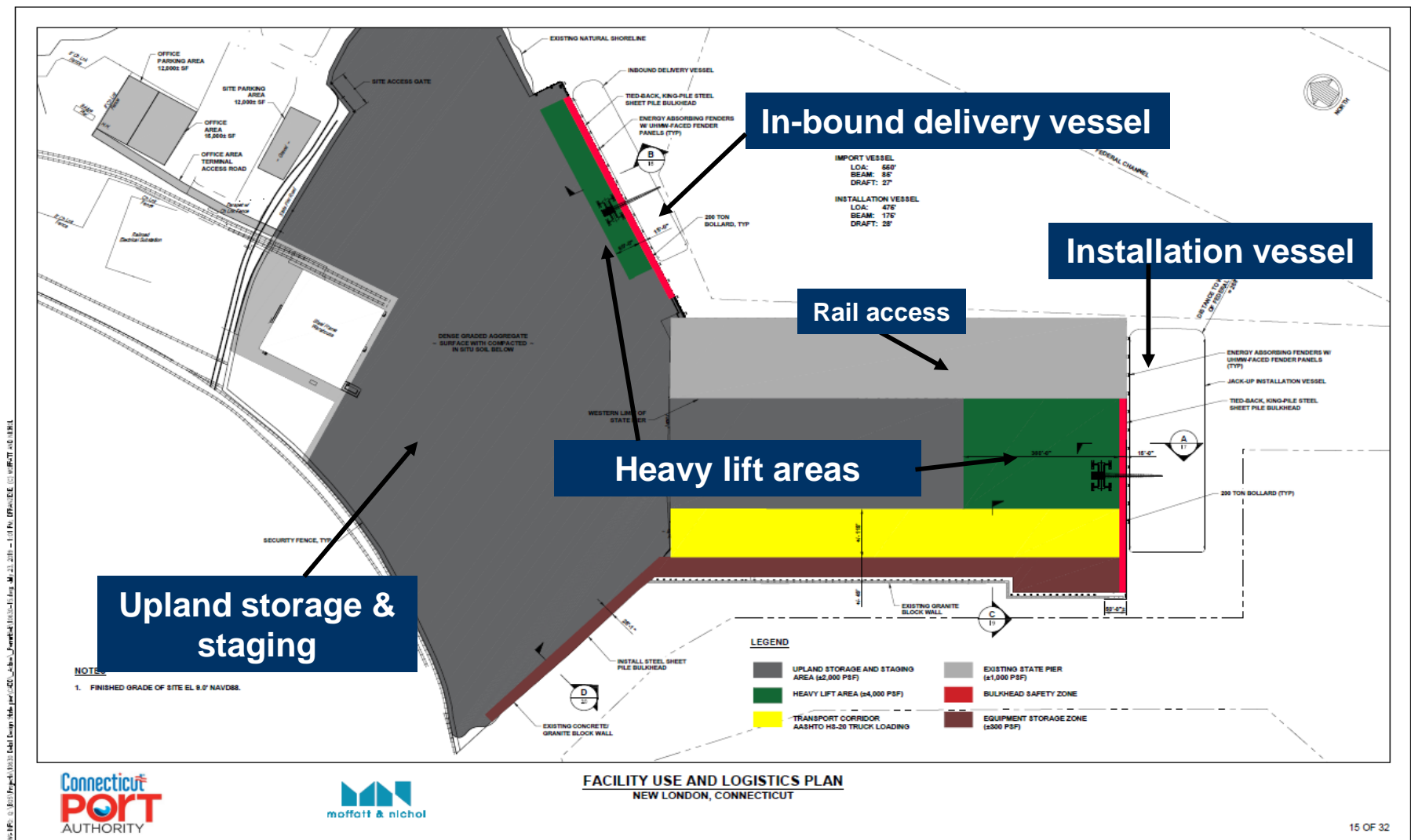
Other states are actively pursuing offshore wind capable port facilities as well.

The Connecticut Port Authority Is Implementing A Plan To Improve Utilization Of State Pier And Capture Connecticut's Offshore Wind Vision

- Summer 2018 - Commenced competitive solicitation
 - RFP solicited proposals from port operators
 - RFP also solicited interest from offshore wind developers
- January 2019 - Selected Gateway Terminal as new State Pier Operator
 - Gateway will pay Port Authority a minimum of a \$500,000 annual fee that will increase by \$250,000 every 5 years
 - The Port Authority will receive a variable fee of 7 percent of Gateway's gross revenues at State Pier [with a Minimum Annual Guarantee (MAG) of \$500,000]
 - Plus 50% of wharfage and dockage user fees.
- May 2019 - Announced Memorandum of Understanding (MOU) with Ørsted, Eversource & Gateway
 - Construct a world class, heavy lift pier facility that will serve the region for decades to come
 - \$93 million investment (plus contingency) for infrastructure upgrades will meet the requirements for heavy-lift capable port for project and conventional cargo, and create opportunity to secure wind turbine generator hub
 - Leverages state bonding authority with private investment of approximately 62% of project costs
- September 2019 - Ørsted, Eversource and Gateway Terminal nearing final detailed agreements; negotiations are ongoing

Overview Of Proposed Infrastructure Improvements To State Pier

- Permitting and site investigations are underway
- Contractor selection will begin later this year
- Construction will begin early 2020
- Initial work would focus on on-shore improvements
- Subsequent work will include filling new pier area
- Early 2022 expected completion date



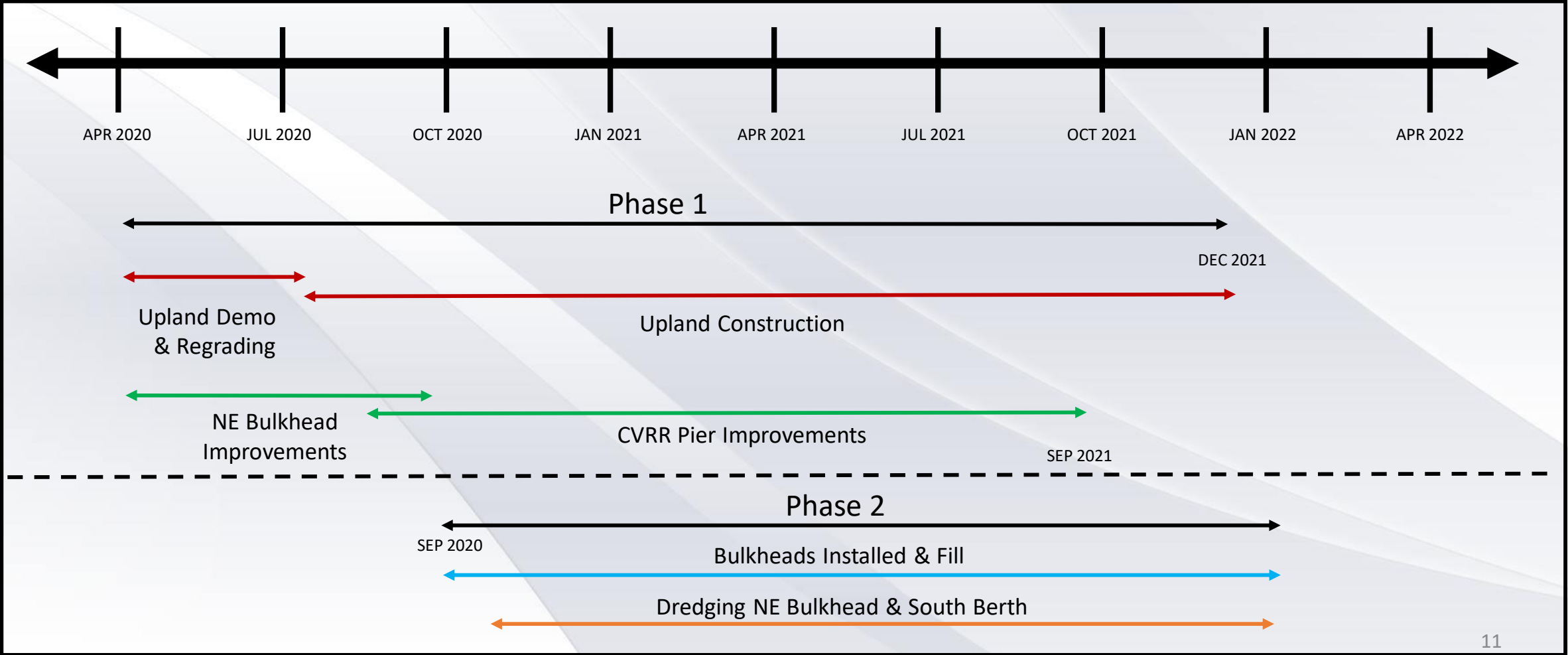
Preliminary Design

Heavy Lift Crane in Operation



Construction Schedule

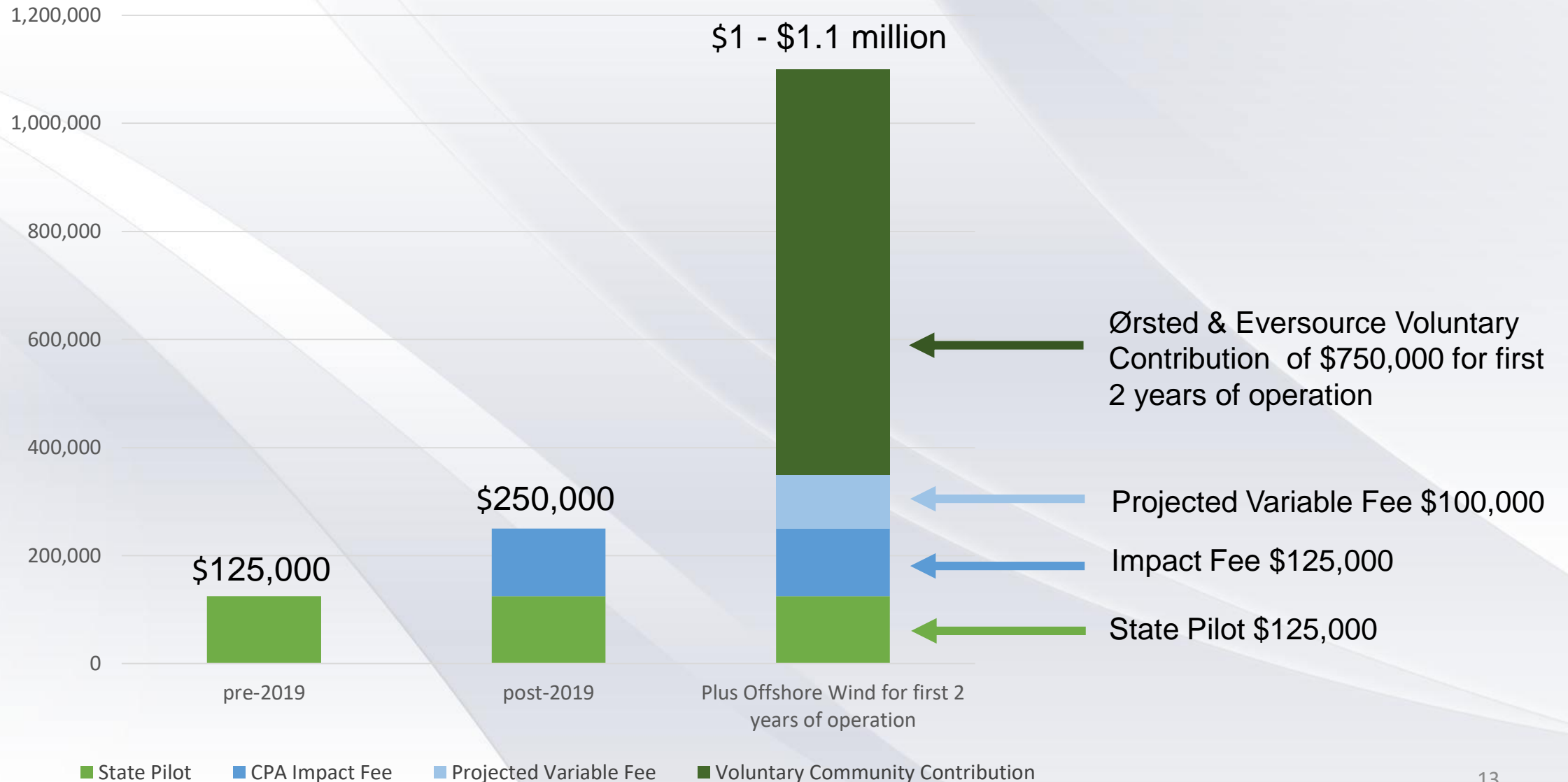
In service date of April 2022 is aggressive yet achievable.



Infrastructure Improvements Will Be Financed Jointly By The Port Authority, Ørsted & Eversource

- Ørsted and Eversource will fund \$57 million of construction costs
 - Ørsted and Eversource commitment increases if certain milestones are achieved, including \$10 million for completion of improvements by early 2022
- Remaining costs will be funded by the Port Authority
 - Current cost estimate is \$93 million (plus contingency)
 - Ørsted & Eversource will fund \$57.5 million and the Port Authority will fund \$35.5 million
 - If the improvements are completed by early 2022, Ørsted & Eversource will fund \$67 million and the Port Authority will fund \$26 million
- Once construction is complete, Connecticut will continue to own State Pier and Ørsted and Eversource will enter into a ten year lease agreement-Ørsted and Eversource will pay a \$3 million annual lease payment to the Port Authority
- In periods where Ørsted and Eversource are not using State Pier, the facility will be marketed to other customers to ensure maximum utilization of the State Pier
- Gateway will continue to serve as the terminal operator

Total Annual Payments to New London will Exceed \$1 million in the first 2 years of operations; more than 8x the amount New London has received historically.



Infrastructure Improvements Will Allow State Pier To Perform As Offshore Wind Turbine Hub

Significantly increasing vessel traffic & jobs generating high-skilled, long-term employment In New London

- Typical port traffic during 800 MW offshore wind farm construction
 - 60 - 80 wind turbine generator delivery vessels
 - 20 - 40 wind turbine generator installation vessels
- Wind Turbine Generator Pre-Assembly Jobs – salary \$60,000 - \$100,000
 - Local Technicians
 - Ground Technicians
 - Tower Technicians
 - Logistics Assistants
 - Logistics Coordinators
 - Paint Technicians
 - Blade Technicians
 - Preassembly Technicians
 - Stevedores
 - Terminal workers
 - Crane Operator & Crew
 - Quality Inspectors
 - HSE inspectors
 - Electricians
 - Welders



Wind Turbine Generator Delivery And Load Out Sequence

- Step 1: Delivery vessel will arrive at State Pier and towers, nacelles and blades will be unloaded
 - Unloading delivery vessel typically takes 1 day while components are unloaded and placed in upland storage. Frequency: weekly
- Step 2: Continuous component assembly and preparation for installation
 - Continuous pre-assembly work to take place in the harbor including electrical and mechanical preparation of the components prior to offshore installation. In the days prior to arrival of each installation vessel, components are staged on the pier ready for loading onto the installation vessel.
- Step 3: Loading installation vessel
 - Outbound Installation vessel arrives. Towers, nacelles and blades loaded onto vessel and it departs for offshore wind lease area. Loading installation vessel typically takes 1 – 2 days. Frequency: weekly or bi-weekly depending on weather.



Visual Simulation of State Pier during Loading of Installation Vessel



Anticipated Job Creation

Pier infrastructure improvement construction (2 years):

- 460 direct jobs created
- 395 indirect & induced jobs created

(Economic Impact of Pier Upgrades, CERC, May 2019)

Wind Turbine Generator Active Operations:

- Anticipated 400+ jobs to serve the current portfolio of projects

Near Term Critical Path Items



Delivery vessel

- Finalize agreements between Port Authority, Gateway Terminal and Ørsted and Eversource
- State of CT/Office of Policy and Management review of agreement
- Port Authority Board to approve final agreements
- Launch competitive solicitation for construction contractors
- Obtain permission to fill between piers and acquire additional property to expand the pier footprint
- Complete local, state and federal permitting process

Closing Remarks